

RENEWABLE ENERGY DEVELOPMENT ACT OF 1983

JUNE 8 (legislative day, JUNE 6), 1984.—Ordered to be printed

Mr. McCLURE, from the Committee on Energy and Natural Resources, submitted the following

REPORT

[To accompany H.R. 3169]

The Committee on Energy and Natural Resources, to which was referred the Act (H.R. 3169) to amend the Energy Policy and Conservation Act to facilitate commerce by the domestic renewable energy industry and related service industries, having considered the same, reports favorably thereon with an amendment and recommends that the Act, as amended, do pass.

The amendment is as follows:

On page 4, line 17, strike out the word "Commerce" and insert in lieu thereof the word "Energy".

PURPOSE

H.R. 3169 would amend the Energy Policy and Conservation Act to facilitate commerce by the domestic renewable energy industry and related service industries. Under the Act, the Secretary of Commerce would be responsible for assessing the competitive state of the renewable energy industry, and the export barriers it faces, and implement a program to strengthen and coordinate the Federal effort in assisting the industry.

The legislation directs the Secretary of Commerce to conduct an evaluation of the domestic renewable industry and assess the industry's ability to compete in international markets. The study would include an assessment of the Federal government's activities affecting renewable energy technology commerce. Subsequent to the evaluation, H.R. 3169 requires the establishment of a program in the Department of Commerce to enhance domestic renewable energy technology and consolidate and coordinate existing Federal activities affecting the industry.

The bill also establishes an interagency working group, chaired by the Secretary of Energy and composed of relevant Federal agency and industry representatives to encourage cooperation among these agencies and the renewable energy industry and to aid in carrying out the Secretary's program.

#### BACKGROUND AND NEED

The United States technological lead in solar energy is being overtaken by foreign competitors. According to the Solar Energy Industry Association, the U.S. market share of world photovoltaic sales dropped by 20 percent since 1980. A major reason for this loss can be attributed to aggressive foreign government efforts which encourage and subsidize renewable energy technology exports.

Germany, for example, jointly develops and tests photovoltaic power generation with a number of developing countries including Egypt, Argentina, Brazil, The People's Republic of China, Indonesia and the Philippines. The Japanese have attained some significant technological successes in photovoltaics and are expanding their efforts in this area at a rapid pace.

Foreign competitor nations often provide liberal financing through export subsidies and mixed financing packages including export subsidies and congressional aid. In the assessment of the Federal Government's activities affecting renewable energy technology commerce, the Department of Commerce is directed under the committee reported legislation to make recommendations as to how the various Federal agencies and programs might offer the industry more competitive financing. The U.S. renewable energy industry is becoming increasingly unable to compete effectively in international markets. Smaller and medium-sized businesses which characterize the industry, are relatively new firms which in many cases lack the marketing and export experience necessary to compete in world markets. A lack of trade, market and statistical information compounds the problems of smaller firms.

Information on potential foreign markets is not readily available to most U.S. renewable energy companies, including information on tariff and nontariff barriers, trade laws and specific country by country export incentives and disincentives.

Federal activities which could benefit potential renewable energy export firms are not coordinated and readily available. Many companies are unable to expend the time and resources necessary to pursue and examine every government program.

H.R. 3169 requires that the Department of Commerce assess the activities of the Federal Government affecting renewable energy industry commerce. The Secretary of Commerce would be expected to assess programs in the following organizations: Agency for International Development, Department of Energy, Export-Import Bank, Trade and Development Program, Overseas Private Investment Corporation, and the Small Business Administration.

The interagency working group would be expected to increase the efficiency of these organizations' ability to aid the domestic renewable energy industry by facilitating cooperation and identifying duplication as well as deficiencies in the Federal programs. The Committee expects that the working group would be established

shortly after enactment of the legislation and would be responsible for assisting the Secretary of Commerce in implementation of the programs and for other duties as needed.

The Committee also expects that, in addition to private industry, the following government agencies will be represented on the inter-agency working group: The State Department, Agency for International Development, Department of Defense, Department of Energy, Export-Import Bank, Trade and Development Program, Overseas Private Investment Corporation, Small Business Administration, and the Treasury Department. The Committee recommends that, in addition to other activities assigned to the Inter-agency working group, that tax incentives be examined as a method of assisting the renewable energy industry in competing within world markets.

#### HEARING

On March 22, 1984, the Subcommittee on Energy Conservation and Supply held a hearing on H.R. 3169. Representatives of the Commerce Department, the Department of Energy, the Export Council on Renewable Energy and two industry representatives testified.

James R. Phillips, the Commerce Department's Assistant Secretary for Capital Goods and International Construction presented views on H.R. 3169. The Commerce Department expressed full support for the goals and objectives of the bill. The Department's witness testified that the needs identified in H.R. 3169 are presently being addressed by the Commerce Department and that the framework and structure now in place will ensure that effective coordination among government and industry in identifying export opportunities continues. The Department participates in and supports interagency cooperation and endorses all such efforts to facilitate cooperation. The witness cited the Commerce Department's initiation of a competitive assessment of the U.S. renewable energy industry—the first to be done for an emerging industry sector—as an example of why no legislative action is required. The Department of Commerce does not support enactment of H.R. 3169.

Donna R. Fitzpatrick, Principal Deputy Secretary for Conservation and Renewable Energy, presented the Department of Energy's views on H.R. 3169. The Department of Energy also supports the goals of H.R. 3169 and recognizes the benefits of increased exports by the U.S. renewable energy industry. The Department believes many of the objectives of the bill are currently being pursued by various Federal agencies operating under existing statutory authorities. The Department of Energy does not support enactment of H.R. 3169.

The DOE/Commerce Department Memorandum of Understanding establishing a cooperative interagency effort for the exhibition and international trade promotion of renewable energy, and Department of Commerce sponsored trade law research studies were cited as examples of the success of current interagency efforts in promoting renewable energy exports.

Thomas L. Mayfield, Director of International Business Development of Martin Marietta Aerospace Corporation Technical Oper-

ations presented Martin Marietta's support for H.R. 3169. Citing his 4 years of experience marketing Martin Marietta's solar equipment on a worldwide basis, Mr. Mayfield gave numerous examples of the inability of U.S. agencies to cooperate with industry in a timely manner to secure development contracts in developing nations. The number of U.S. agencies that Martin Marietta had to deal with as well as the lack of a lead agency contributed to his company losing out on an initiative in Jamaica. This situation was contrasted with the relative speed with which the Canadian, Japanese, and German Governments had teamed with industry to provide attractive financing plans to developing nations.

While praising the Commerce Department and the Energy Department efforts to promote U.S. renewable energy equipment sales, he stressed the need for better coordination and establishment of a lead agency. A small industry cannot afford to go through every agency and spend time trying to discover what programs are available. He said one of the biggest problems for U.S. firms establishing markets is that agency overseas field offices, particularly, U.S. AID offices, do not know the latest technical data on U.S. equipment.

Samuel E. Enfield, Executive Director of the Export Council on Renewable Energy testified in support of H.R. 3169. He praised the Commerce Department's Export Development Program for renewable energy technologies but he indicated that H.R. 3169 and the Export Development Program are necessary as there is a general perception that the Commerce Department tends to serve established industries more than it does emerging industries. H.R. 3169 is an attempt to raise the perception of the value of the renewable energy industry within the Commerce Department. He reiterated Mr. Mayfield's concern that competitor nations are more aggressive in the coordination of various programs to address international markets. H.R. 3169 would improve the U.S. situation by setting an environment in which government and industry can work together in a more effective fashion and more effective cooperation could result. An interagency working group would allow industry to better educate government program personnel—who are often unfamiliar with this new industry and its technologies—as to the reality of the international markets and the problems U.S. industry confronts in those markets.

Herbert J. Mulqueen, Jr., President, C.H.H. Technologies, Inc. testified on behalf of H.R. 3169. C.H.H. Technologies is a small company that has invented a burner unit capable of using wood, sawdust, coconut shells, peanut shells and other cellulosic materials and designed for retrofit applications on oil or gas-fired industrial boilers. Mr. Mulqueen reviewed the technical endorsement received by his company's product, as well as the large number of inquiries he has received from various parts of the world regarding commercial purchases. Mr. Mulqueen stated that after substantial expenditures on developing this product, his company has had great difficulty affording the expenses of international marketing that would allow him to capitalize on the tremendous interest expressed worldwide in the C.H.H. Technologies burner unit. Mr. Mulqueen then reviewed the activities of his company in conjunction with the Trade Development Program operated by the Com-

merce Department's International Trade Administration. At the Department's request, Mr. Mulqueen participated in the U.S. pavilion, organized by the Commerce Department, at the Asia Energy Trade Show. This has resulted in a strong likelihood of concluding a \$3 million transaction in the Philippines. Mr. Mulqueen also participated in a renewable energy product film produced by the Commerce Department. This film, which is being sent on a worldwide viewing program, has resulted in a large number of inquiries about the C.H.H. Technologies burner unit.

While praising the efforts of the Commerce Department in assisting in the international marketing of his products, Mr. Mulqueen stated that additional staff was needed at the Department in this program area. He recounted an instance in which a Heineken Brewery subsidiary in New Guinea became interested in the C.H.H. Technologies burner unit, based on a Mitre Corporation report on wood burning applications, sent technical personnel to examine the wood burning unit, and expressed an intention to purchase it. The Australian Government then made a grant to the New Guinea company, in the form of a burner unit of Australian manufacture, and C.H.H. Technologies lost the sale. Mr. Mulqueen discussed the role of Agency for International Development, stating that it is principally interested in conducting studies, and is not succeeding in helping its client nations reduce oil consumption. He strongly advocated that AID conduct demonstrations of commercially available technologies, in order that the client nations might observe their operation and make purchasing decisions based on those observations.

Mr. Mulqueen also discussed the Department of Energy's research and development program, suggesting that it is oriented principally toward research and thus is not of particular use to him in his efforts to market the proven C.H.H. Technologies burner. He also suggested that the Department is more interested in more esoteric energy applications, such as telecommunications, rather than in more mundane applications, such as those for his burner unit, which represent areas of greater energy consumption. In response to an inquiry from Senator Hatfield regarding the usefulness of overseas military installations as demonstration sites for new, cost-effective energy applications such as the C.H.H. Technologies burner unit, Mr. Mulqueen responded that the ability to refer prospective buyers to operating units in their vicinity is critical to opening new markets. Use of overseas military installations for this purpose would, as would AID commercial demonstrations, serve his company's international marketing needs well.

#### LEGISLATIVE HISTORY

H.R. 3169 was introduced by Congressman Ron Wyden on May 26, 1983, and referred to the Subcommittee on Energy Conservation and the Subcommittee on Commerce, Transportation, and Tourism. On October 19 and October 27 respectively, the Subcommittees reported the bill without amendment, to the Committee on Energy and Commerce. The Committee on Energy and Commerce reported the bill to the House on November 11, 1983, and it passed the House by voice vote on November 16, 1983.

H.R. 3169 was referred to the Committee on Energy and Natural Resources on November 16, 1983, and a hearing was held before the Energy Conservation and Supply Subcommittee on March 22, 1984.

The Senate Committee on Energy and Natural Resources, in an open business session on May 23, 1984, by majority vote of a quorum present ordered reported H.R. 3169 with one amendment.

#### COMMITTEE RECOMMENDATION AND TABULATION OF VOTES

The Senate Committee on Energy and Natural Resources, in an open business session on May 23, 1984, by unanimous vote of a quorum present recommended that the Senate pass H.R. 3169, if amended as described herein.

The rollcall vote on reporting the measure was 18 yeas and 1 nay as follows:

##### YEAS

Mr. McClure  
Mr. Hatfield  
Mr. Weicker\*  
Mr. Domenici  
Mr. Wallop  
Mr. Warner  
Mr. Murkowski  
Mr. Hecht\*  
Mr. Chafee\*  
Mr. Heinz\*  
Mr. Evans  
Mr. Johnston\*  
Mr. Bumpers  
Mr. Ford  
Mr. Matsunaga\*  
Mr. Melcher  
Mr. Tsongas\*  
Mr. Bradley

##### NAYS

Mr. Nickles

\* Indicates voted by proxy.

#### COMMITTEE AMENDMENT

The Committee, on page 4 of the bill, struck on line 17, "Commerce" and inserted in lieu thereof "Energy".

This amendment substitutes the Secretary of Energy for the Secretary of Commerce as chairman of the Interagency Working Group, as established by H.R. 3169.

DOE has recently undertaken organization of an interagency working session on international photovoltaics development. It is hoped that bringing together in one session representatives of all of the Federal Government's international programs for an update on the technologies and products of the U.S. photovoltaics industry will lead to greater support for photovoltaics use worldwide by these programs, either individually or through cooperative efforts.

This working session represents precisely the approach intended for the Interagency Working Group outlined in H.R. 3169, and DOE's initiative suggests that it, rather than the Department of

Commerce, brings the highest degree of interest to this area. Furthermore, DOE's lead role in energy policy makes it a preferable support organization for such a varied group as the Interagency Working Group.

#### SECTION-BY-SECTION ANALYSIS

##### *Section 1*

Self explanatory.

##### *Section 2*

A new section 256 is added to Part B, Title II of the Energy Policy and Conservation Act.

The new subsection (a) of Section 256 establishes that the purposes of this section is to implement the responsibilities of the United States under Chapter VII of the International Energy Program with respect to development of alternative energy by facilitating the overall activities of the domestic renewable energy industry and related service industries to create new markets.

Subsection (b) requires the Secretary of Commerce to conduct an evaluation assessing the technical and commercial status of the renewable energy industry.

Subsection (c) requires the Secretary of Commerce, subsequent to an evaluation, to establish a program to enhance commerce in export of renewable energy technology.

Subsection (d) requires the Secretary of Energy to establish and chair an interagency working group, composed of industry representatives and relevant Federal agency officials.

#### COST AND BUDGETARY CONSIDERATIONS

The purpose of H.R. 3169, the Renewable Energy Industry Development Act of 1983, is to implement existing responsibilities of the United States under Chapter VII of the International Energy Program. Therefore, the Committee does not intend that this measure authorize any additional budget authority for fiscal year 1984 other than that already available to the Department of Commerce and the Department of Energy. If any additional fiscal year 1984 costs are incurred in implementing the measure, the Committee intends that they be absorbed within funds otherwise available to the Departments.

With respect to fiscal years beginning with fiscal year 1985, the committee reported bill directs that the necessary funds to carry out the program established by H.R. 3169, shall be requested. As the activities mandated under the measure are ongoing under existing authorizations, the Committee intends that fiscal year 1985 funding for such activities be provided for pursuant to existing authorizations, or current services levels of appropriations.

The following estimate of the cost of this measure has been provided by the Congressional Budget Office:

U.S. CONGRESS,  
CONGRESSIONAL BUDGET OFFICE,  
Washington, D.C., May 23, 1984.

Hon. JAMES A. McCLURE,  
*Chairman, Committee on Energy and Natural Resources, U.S.  
Senate, Dirksen Senate Office Building, Washington, D.C.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has reviewed H.R. 3169, the Renewable Energy Industry Development Act of 1983, as ordered reported by the Senate Committee on Energy and Natural Resources, May 23, 1984. We estimate that the federal government would spend approximately \$0.5 million annually for activities mandated by this bill, based on the 1984 program level.

The bill directs the Secretary of Commerce to evaluate the domestic renewable energy industry and establish a program for enhancing commerce in renewable energy technologies. The bill also requires the establishment of an interagency working group to coordinate federal activities affecting commerce in renewable energy programs.

Currently, the Department of Commerce and the Department of Energy promote trade in renewable energy systems, and are spending approximately \$0.5 million in fiscal year 1984 for this purpose. This bill mandates such activities in subsequent years as well.

Enactment of this bill would not affect the budgets of state and local governments.

We would be pleased to answer any questions you may have concerning this estimate.

Sincerely,

ERIC HANUSHEK  
(For Rudolph G. Penner).

#### REGULATORY IMPACT

In compliance with paragraph 11(b) of Rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred in carrying out the provisions of this measure.

H.R. 3169 provides for coordination among various Federal agencies in carrying out their responsibilities in promoting domestic renewable energy technologies exports and is not, therefore, expected to have any additional regulatory impact.

#### EXECUTIVE COMMUNICATIONS

The Committee did not receive executive communications from either the Department of Commerce or Department of Energy. However the statements of both agencies are summarized in the hearing section found earlier in the report.

#### CHANGES IN EXISTING LAW

In compliance with paragraph 12 of Rule XXVI of the Standing Rules of the Senate, changes in existing law made by the Act, H.R. 3169, as ordered reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is

printed in italic, existing law in which no change is proposed is shown in roman):

## ENERGY POLICY AND CONSERVATION ACT

\* \* \* \* \*

### TABLE OF CONTENTS

\* \* \* \* \*

## TITLE II—STANDBY ENERGY AUTHORITIES

### PART A—GENERAL EMERGENCY AUTHORITIES

- Sec. 201. Conditions of exercise of energy conservation and rationing authorities.  
 Sec. 202. Energy conservation contingency plans.  
 Sec. 203. Rationing contingency plan.

### PART B—AUTHORITIES WITH RESPECT TO INTERNATIONAL ENERGY PROGRAM

- Sec. 251. International oil allocation.  
 Sec. 252. International voluntary agreements.  
 Sec. 253. Advisory committees.  
 Sec. 254. Exchange of information.  
 Sec. 255. Relationship of this title to the international energy agreement.  
 Sec. 256. Domestic renewable energy industry and related service industries.

\* \* \* \* \*

## TITLE II—STANDBY ENERGY AUTHORITIES

\* \* \* \* \*

### PART B—AUTHORITIES WITH RESPECT TO INTERNATIONAL ENERGY PROGRAM

\* \* \* \* \*

#### DOMESTIC RENEWABLE ENERGY INDUSTRY AND RELATED SERVICE INDUSTRIES

*SEC. 256. (a) It is the purpose of this section to implement the responsibilities of the United States under chapter VII of the international energy program with respect to development of alternative energy by facilitating the overall abilities of the domestic renewable energy industry and related service industries to create new markets.*

*(b)(1) Before the later of—*

*(A) 6 months after the date of the enactment of this section, and*

*(B) May 31, 1985,*

*the Secretary of Commerce shall conduct an evaluation regarding the domestic renewable energy industry and related service industries and submit a report of his findings to the Congress.*

*(2) Such evaluation shall include—*

*(A) an assessment of the technical and commercial status of the domestic renewable energy industry and related service industries in domestic and foreign markets;*

*(B) an assessment of the Federal Government's activities affecting commerce in the domestic renewable energy industry and related service industries and in consolidating and coordinating such activities within the Federal Government; and*

(C) an assessment of the aspects of the domestic renewable energy industry and related service industries in which improvements must be made to increase the international commercialization of such industry.

(c)(1) On the basis of the evaluation under subsection (b), the Secretary of Commerce shall, consistent with existing law, establish a program for enhancing commerce in renewable energy technologies and consolidating or coordinating existing activities for such purpose.

(2) Such program shall provide for—

(A) the broadening of the participation by the domestic renewable energy industry and related service industries in such activities;

(B) the promotion of the domestic renewable energy industry and related service industries on a worldwide basis;

(C) the participation by the Federal Government and the domestic renewable energy industry and related service industries in international standard/setting activities; and

(D) the establishment of an information program under which—

(i) technical information about the domestic renewable energy industry and related service industries shall be provided to appropriate public and private officials engaged in commerce, and

(ii) marketing information about export opportunities shall be available to the domestic renewable energy industry and related service industries.

(3) Necessary funds required for carrying out such program shall be requested in connection with fiscal years beginning after September 30, 1984.

(d) There shall be established an interagency working group which, in consultation with the representative industry groups and relevant agency heads, shall make recommendations to coordinate the actions and programs of the Federal Government affecting commerce in renewable energy products and related services. The Secretary of Energy shall be the chairman of such group. The heads of appropriate agencies may detail such personnel and may furnish such services to such working group, with or without reimbursement, as may be necessary to carry out its functions.